

Work Order ID 138353

138353

Page 1

Tuesday, October 27, 2015 11:26:59 AM

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: AS350 Cable Cutter System
 Start Date: 10/19/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/26/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: **OCT 29 2015** Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	B								
100	Document Control	0.00							
100	DOCUMENT CONTROL								DAS 16 9-89
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								15/12/18
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect Kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

MLJ 1571-09

NOV 06 2015

DAS
8
9-89
DAS
28
9-89

FL

DAS
16
9-89
15/12/18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter		☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes		☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
				OTHER :							

Work Order ID 138353

Tuesday, October 27, 2015 11:26:59 AM

138353

Page 2

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/26/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP 646.4001
Location: _____

/	DAS 28 9-89	DEC 18 2015
---	-------------------	-------------

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MLJ		DEC 18 2015
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MLJ	DEC 18 2015
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, October 27, 2015 11:26:58 AM

Page 1

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3301		Manufactured	No				Each	6.0000		1			
646 3301									**				
Upper Cutter Assy													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck018				6					DAS
				135452				1					6
				136156				5					9-89
646.3001		Manufactured	No				Each	3.0000		1			
646 3001									**				
Lower Cutter Assy													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck018				3					DAS
				136276				3					8
646.2910		Manufactured	No				Each	0.0000		1			
646 2910									**				
Deflector													
646.3810		Manufactured	No				Each	18.0000		2			
646 3810									**				
Bracket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK106				18					DAS
				136186				15					6
				136560				3					9-89

NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3510 Manufactured No

Each 2.0000

1

DAS
28
9-89

646 3510

Strut

**

136/114

Location

Loc Qty

Loc Code

cck104

2

127077

2

646.3511 Manufactured No

Each 9.0000

1

646 3511

Strut

**

Location

Loc Qty

Loc Code

cck104

9

136169

9

DAS
28
9-89

647.0112 Manufactured No

Each 123.0000

2

647 0112

Strut Bracket

**

Location

Loc Qty

Loc Code

CCK032a

114

123318

22

M130388

92

CCK107

1

122245

1

CCK109

8

122871

8

123318

0

647.7703 Manufactured No

Each 8.0000

2

647 7703

Strut Assembly

**

Location

Loc Qty

Loc Code

CCK114

8

136140

8

NOV 06 2015

DAS
28
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																												
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : _____																																																															

Picklist Print

Tuesday, October 27, 2015 11:26:58 AM

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

Each

1,509.000

138

NAS1149F0332P

133284

Washer

(only 1388)

Location

Loc Qty

Loc Code

GA	162	
122063	162	
ST260a	636	
m128401	6	
m131026	80	
m131697	50	
m133284	500	
st268	117	
123900	7	
m130388	86	
m133077	24	
ST288	594	
m133134	594	

DAS
6
9-89

DAS
28
9-89

MS21042L3

Purchased

No

Each

564.0000

61

MS21042L3

133498

Nut

(only 618)

Location

Loc Qty

Loc Code

FP001	334	
M130922	334	
GA	136	
M131317	136	
ST305	94	
116549	12	
126333	49	
M128754	2	
M132123	17	
M132382	2	
M132883	8	
M133134	4	

DAS
28
9-89

NOV 06 2015

Tuesday, October 27, 2015 11:26:58 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER :							

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3110

Manufactured No

Each

0.0000

1

646 3110

Channel

646.3710

Manufactured No

Each

19.0000

1

646 3710

Doubler

Location

Loc Qty

Loc Code

CCK002

19

127550

19

Each

14.0000

1

646.3210

Manufactured No

646 3210

Support

Location

Loc Qty

Loc Code

cck020

14

135549

5

136217

9

Each

11.0000

1

646.3713

Manufactured No

646 3713

Gusset

Location

Loc Qty

Loc Code

cck105

11

120631

11

Each

153.0000

5

MS24694-S51

Purchased

No

MS24694-S51

Screw

Location

Loc Qty

Loc Code

ST289

153

m130928

153

NOV 06 2015

Tuesday, October 27, 2015 11:26:58 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



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Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER : _____ _____ _____			
Misidentified ☐	☐	Past Due	☐				

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-13A
AN3-13A
 Bolt

Purchased No

Each 54.0000 1

Location

Loc Qty

Loc Code

CA	3	
m129682	3	
GA	20	
m127070	20	
ST349	31	
m131305	31	

DAS 28
 6 9-89
 9-89

AN3-4A
AN3-4A
 Bolt

Purchased No

Each 159.0000 10

Location

Loc Qty

Loc Code

ST338a	100	
m133234	100	
ST350	59	
m129682	50	
m132317	5	
m133064	4	

DAS 28
 6 9-89
 9-89

CR3213-5-3
CR3213-5-3
 Cherry Rivet

Purchased No

Each 132.0000 14

Location

Loc Qty

Loc Code

ST319	132	
m127831	16	
m130388	16	
m132763	100	

DAS 28
 6 9-89
 9-89

5-03

131340

NOV 05 2015

DQA: _____ Date: _____



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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
				OTHER : ☐			

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Page 6

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-5.5

Purchased

No

Each

159.0000

8

DAS

6

DAS

28

9-89

9-89

MS20470AD5-5 5

Rivet

Location

Loc Qty

Loc Code

ST310

159

123425

159

Each

30.0000

1

DAS

6

DAS

28

9-89

9-89

646.3711

Manufactured

No

646 3711

Clip

Location

Loc Qty

Loc Code

cck105

30

120626

30

Each

20.0000

1

DAS

6

DAS

28

9-89

9-89

646.3712

Manufactured

No

646 3712

Clip

Location

Loc Qty

Loc Code

cck105

20

101119

1

120630

19

Each

16.0000

1

DAS

6

DAS

28

9-89

9-89

646.3811

Manufactured

No

646 3811

Radius Block

Location

Loc Qty

Loc Code

CCK106

16

110717

1

122938

15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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		OTHER : ☐																																																																					

Picklist Print

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-6A

Purchased

No

Each

114.0000

2

AN3-6A

Bolt

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

ST338a

100

M131305

100

ST349

14

M133064

14

MS24694-S55

Purchased

No

Each

80.0000

1

MS24694-S55

Screw

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

ST289

80

m132803

80

Each

9.0000

1

646.3610

Manufactured

No

646 3610

Filler

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

cck104

9

135625

3

136278

6

Each

12.0000

1

646.3714

Manufactured

No

646 3714

Gusset

**

DAS

6

DAS

28

9-89

9-89

Location

Loc Qty

Loc Code

cck105

12

120632

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-6

Purchased

No

Each

1,040.000

8

MS20470AD5-6

RIVET

DAS 28
6 9-89
9-89

Location

Loc Qty

Loc Code

CCK004

890

124089

890

ST309

150

105433

150

Each

14.0000

2

646.3812

Manufactured

No

646 3812

Gusset Bracket

DAS 28
6 9-89
9-89

Location

Loc Qty

Loc Code

CCK106

14

136113

14

Each

200.0000

4

AN3-3A

Purchased

No

AN3-3A

Bolt

DAS 28
6 9-89
9-89

Location

Loc Qty

Loc Code

ST338a

200

m131624

200

Each

10.0000

1

646.3813

Manufactured

No

646 3813

Strut Bracket

DAS 28
6 9-89
9-89
NOV 06 2015

Location

Loc Qty

Loc Code

CCK106

7

127453

2

132541

5

CCK23a

3

130946

3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
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		OTHER :							

Picklist Print

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Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-7

Purchased

No

Each

536.0000

3

MS20470AD5-7

Rivet

DAS 6 28
9-89 9-89

Location

Loc Qty

Loc Code

ST309

536

123425

536

Each

151.0000

18

MS21047-3

Purchased

No

MS21047-3

Nut Plate

DAS 6 28
9-89 9-89

Location

Loc Qty

Loc Code

CCK007

50

m133031

50

ST303

101

m130388

8

m133134

43

m133234

50

Each

350.0000

36

CCR264SS3-02

Purchased

No

CCR264SS3-02

Rivet, Cherry

DAS 6 28
9-89 9-89

Location

Loc Qty

Loc Code

ST321

350

M132317

4

M133134

146

M133316

200

NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-5A

Purchased

No

Each

241.0000

2

AN3-5A

Bolt

**

133483

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CA
m129682
FP001
m133234
GA
m131420

128
128
22
22
91
91

646.3715

Manufactured

No

Each

13.0000

2

646 3715

Strut Doubler

**

Location

Loc Qty

Loc Code

cck105
135537
136215

13
6
7

_____2_____

DAS
6
9-89

DAS
28
9-89

MS27039-1-12

Purchased

No

Each

78.0000

6

MS27039-1-12

Screw

**

Location

Loc Qty

Loc Code

ST285
m133031

78
78

_____6_____

DAS
6
9-89

DAS
28
9-89

646.3716

Manufactured

No

Each

16.0000

1

646 3716

Gauge Bracket

**

Location

Loc Qty

Loc Code

cck105
133105
136122
136410

16
2
6
8

_____1_____

DAS
6
9-89

NOV 06 2015

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																				
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																				
Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																																
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Root Cause <table style="width:100%; border: none;"> <tr><td style="width:50%;">Environment ☐</td><td style="width:50%;">No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Pressure/Forced ☐</td> <td style="width:33%;">Temperature/Cure ☐</td> <td style="width:33%;">Power Loss/Surge ☐</td> <td style="width:33%;">Positioned Wrong ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
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		OTHER :																																																																					

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20426AD5-7

Purchased

No

Each

78.0000

2

MS20426AD5-7

RIVET

DAS

6 28
9-89 9-89

Location

Loc Qty

Loc Code

ST312

78

101340

8

M132767

70

Each

116.0000

2

MS24694-S54

Purchased

No

MS24694-S54

SCREW

DAS DAS
6 28
9-89 9-89

Location

Loc Qty

Loc Code

ST289

116

m130388

6

m133031

10

m133134

100

Each

412.0000

4

MS27039-1-21

Purchased

No

MS27039-1-21

Screw

DAS DAS
6 28
9-89 9-89

Location

Loc Qty

Loc Code

cck007a

395

m127904

395

ST284

17

m126319

17

Each

206.0000

2

MS27039-1-20

Purchased

No

MS27039-1-20

Screw

DAS DAS
6 28
9-89 9-89

Location

Loc Qty

Loc Code

ST284

206

124326

206

NOV 06 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : ☐							

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-19

Purchased

No

Each

223.0000

22

MS27039-1-19

Screw

Location

Loc Qty

Loc Code

cck007a

200

m133134

200

GA

20

m124326

20

ST285

3

m127904

3

646.3717

Manufactured

No

Each

11.0000

1

646 3717

Doubler

Location

Loc Qty

Loc Code

cck105

11

120633

11

646.3718

Manufactured

No

Each

6.0000

2

646 3718

Custom Washer

Location

Loc Qty

Loc Code

cck105

6

135559

6

646.3719

Manufactured

No

Each

17.0000

2

646 3719

Doubler

Location

Loc Qty

Loc Code

cck105

17

120634

17

DAS
6
9-89
28
9-89

DAS
28
9-89
6
9-89

DAS
28
9-89
6
9-89

DAS
28
9-89
6
9-89

NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

Each

301.0000

2

MS27039-1-10

SCREW

Location

Loc Qty

Loc Code

CA

41

m128635

41

cck007a

200

m132677

200

GA

50

m129541

50

ST285

10

m123522

2

m132640

8

2

DAS
6
9-89

DAS
28
9-89

AN3-11A

Purchased

No

Each

142.0000

10

AN3-11A

Bolt

Location

Loc Qty

Loc Code

ST338a

50

m133363

50

ST349

92

m132823

8

m133234

84

10

DAS
6
9-89

DAS
28
9-89

600.0990

Purchased

No

Each

37.0000

1

600 0990

MAGNABOND 6398 PART A

Location

Loc Qty

Loc Code

PKG

37

M129818

22

M131589

15

7/16/2015

2/11/2016

NOV 06 2015

DAS
28
9-89

EXP 07/2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER :			
Misidentified ☐	☐	Past Due ☐	☐				

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

600.0991	Purchased	No	Each	37.0000	1				
						**		DAS 6 9-89	DAS 28 9-89
600 0991 MAGNOBOND 6398 PART B									

Exp. 07/2016

Location

Loc Qty

Loc Code

PKG

37

M129818

21

7/16/2015

m131589

16

2/11/2016

Each

13.0000

1

DAS 6 9-89

DAS 28 9-89

600.1012

Purchased

No

600 1012

Sealant PR1425B2 (#654 sem)

Exp steady

Location

Loc Qty

Loc Code

cck017

11

m132805

3

m133380

8

6/1/2016

cck018

2

m129749

1

m131364

1

10/30/2015

f

565.0000

8

DAS 6 9-89

DAS 28 9-89

600.0129

Purchased

No

600 0129

VHB TAPE 75935A651

@ 8' feet in length

Location

Loc Qty

Loc Code

CCK095

565

m127920

325

m131311

240

Each

890.0000

5

DAS 6 9-89

DAS 28 9-89

600.1013

Purchased

No

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

Location

Loc Qty

Loc Code

CCK095

890

m131145

890

6/15/2016

NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Page 15

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3910

Manufactured No

Each

16.0000

4

646 3910

Shim

Location

Loc Qty

Loc Code

CCK106

16

122951

16

Each

71.0000

1

646.3911

Manufactured No

646 3911

Shim

Location

Loc Qty

Loc Code

cck023

50

126059

50

cck104

18

126229

18

CCK106

3

123075

3

Each

49.0000

4

646.3912

Manufactured No

646 3912

Shim

Location

Loc Qty

Loc Code

cck023a

10

124501

10

cck104

39

103082

1

123143

38

NOV 06 2015

DAS

8

9-89

DAS

28

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause				FAULT CATEGORY																																																																																																																											
Environment	☐	Design	☐	Doc/Data	☐	Equip/Tooling	☐	Handling/Pre	☐	Material	☐	Internal Transport	☐	Tribal Knowledge	☐	LOA	☐	Substation	☐	Past Expiry Date	☐	Misidentified	☐	No Re-verification	☐	Operator	☐	Offset/Setup	☐	Supplier	☐	Training	☐	Use for Testing	☐	Poor Information	☐	Rushing	☐	Product Improvement	☐	Process Improvement	☐	Manufacturing Process	☐	Past Due	☐	Pressure/Forced	☐	Bending	☐	Centre Not Concentric	☐	Cracks	☐	Crimp/Kink/Ripple/Wave	☐	Cuffs	☐	Crushing	☐	Heat Treat	☐	Wave/Twist in Tube	☐	Marks/Chatter	☐	Temperature/Cure	☐	Set-up	☐	BOM/Route	☐	Broken/Damage/Defect	☐	Inspection Incomplete/Unqualified	☐	Contamination	☐	Countersink	☐	Cut Too Short	☐	Instructions Incomplete/Unclear	☐	Drill Holes	☐	Power Loss/Surge	☐	Folio/Program	☐	Grain	☐	Weld	☐	Wrong Stock Pulled	☐	Out of Sequence	☐	Off-set	☐	Mislabeled	☐	Fit/Function	☐	Misaligned/off center	☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence	☐
OTHER :																																																																																																																															

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3913

Manufactured No

Each

111.0000

1

S ***646 3913***

Shim

Location

Loc Qty

Loc Code

cck023a

25

124108

25

cck023aq

82

126060

82

cck104

2

100136

2

126060

0

CCK106

2

126231

2

AN3-12A

Purchased

No

Each

135.0000

2

S ***AN3-12A***

Bolt

Location

Loc Qty

Loc Code

GA

18

m129682

18

ST338a

100

m133234

100

ST349

17

m133064

17

MS27039-1-16

Purchased

No

Each

138.0000

2

S ***MS27039-1-16***

Screw

Location

Loc Qty

Loc Code

ST285

138

m130388

4

m131317

34

m132344

100

NOV 06 2015

DAS

6

9-89

DAS

28

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

650.9201 Manufactured No

Each 9.0000 2

650 9201

Eyelet Bracket Assembly

**

Location

Loc Qty

Loc Code

cck127

9

136204

9

Each 18.0000

2

DAS
6
9-89

DAS
28
9-89

AN44-5A

Purchased No

AN44-5A

Eyebolt

**

Location

Loc Qty

Loc Code

ST339

18

m126193

10

m133134

8

Each 18.0000

2

DAS
6
9-89

DAS
28
9-89

AN665-34R

Purchased No

AN665-34R

Clevis

**

Location

Loc Qty

Loc Code

ST330

18

M130388

4

M133134

14

Each 56.0000

2

DAS
6
9-89

DAS
28
9-89

AN4C7A

Purchased No

AN4C7A

BOLT

**

Location

Loc Qty

Loc Code

ST340

20

m133363

20

ST345

36

m127363

36

2

NOV 06 2015

DAS
6
9-89

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, October 27, 2015 11:26:59 AM

Page 18

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

Each

800.0000

4

NAS1149F0432P

WASHER

DAS
6
9-89

Location

Loc Qty

Loc Code

ST260a

500

M132551

500

st268

300

M128995

63

M130388

8

M132677

125

M133234

104

Each

2,608.000

2

133863

DAS
28
9-89

MS21042L4

Purchased

No

MS21042L4

Locknut

Location

Loc Qty

Loc Code

CCK004

2000

m133363

2000

FP001

2

m124231

2

GA

67

m127813

67

ST260a

138

m130799

56

m131803

6

m132262

76

ST305

401

m128300

8

m130388

7

m130922

97

m131618

12

m132123

56

m132382

121

m133316

100

DAS
6
NOV 06 2015-89

DAS
28
9-89

Tuesday, October 27, 2015 11:26:59 AM

Shop Packet Print

Page 18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY																																																																																																																											
Environment	☐	Design	☐	Doc/Data	☐	Equip/Tooling	☐	Handling/Pre	☐	Material	☐	Internal Transport	☐	Tribal Knowledge	☐	LOA	☐	Substation	☐	Past Expiry Date	☐	Misidentified	☐	No Re-verification	☐	Operator	☐	Offset/Setup	☐	Supplier	☐	Training	☐	Use for Testing	☐	Poor Information	☐	Rushing	☐	Product Improvement	☐	Process Improvement	☐	Manufacturing Process	☐	Past Due	☐	Pressure/Forced	☐	Bending	☐	Centre Not Concentric	☐	Cracks	☐	Crimp/Kink/Ripple/Wave	☐	Cuffs	☐	Crushing	☐	Heat Treat	☐	Wave/Twist in Tube	☐	Marks/Chatter	☐	Temperature/Cure	☐	Set-up	☐	BOM/Route	☐	Broken/Damage/Defect	☐	Inspection Incomplete/Unqualified	☐	Contamination	☐	Countersink	☐	Cut Too Short	☐	Instructions Incomplete/Unclear	☐	Drill Holes	☐	Power Loss/Surge	☐	Folio/Program	☐	Grain	☐	Weld	☐	Wrong Stock Pulled	☐	Out of Sequence	☐	Off-set	☐	Mislabeled	☐	Fit/Function	☐	Misaligned/off center	☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence	☐
OTHER : _____																																																																																																																															

Picklist Print

Page 19

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN316C4R Purchased No

Each 53.0000 2

AN316C4R

NUT

**

133523

DAS
6
9-89

Location

Loc Qty

Loc Code

ST331

53

m127618

3

m133234

50

DAS
28
9-89

MS21042-3 MS21042L3 Purchased No

Each 247.0000 2

MS21042-3

Nut / use MS21042L3

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST305

247

M128770

10

M129541

15

M129682

199

M130388

23

DAS
28
9-89

MS27039-08-13 Purchased No

Each 370.0000 2

MS27039-08-13

Screw

**

Location

Loc Qty

Loc Code

cck007a

346

124326

346

ST281

24

4067

20

M130388

4

DAS
28
9-89

NOV 06 2015

Tuesday, October 27, 2015 11:26:59 AM

Shop Packet Print

Page 19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : ☐			
Misidentified ☐		Past Due ☐					

Picklist Print

Page 20

Tuesday, October 27, 2015 11:26:59 AM

Work Order ID: 138353

138353

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042-08 MS21042L08 Purchased No

Each 33.0000 2

MS21042-08

USE MS21042L08

m128401

DAS
6
9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

Each 2,160.000

4

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

Location

Loc Qty

Loc Code

GA

346

125268

346

ST260a

500

M133316

500

ST267

393

125268

100

M133284

293

st268

921

M130388

921

DAS
6
9-89

NOV 06 2015

DAS
28
9-89

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04731

SHEET 1 OF 2

DWG NO. 646.4000

REV: A

PREPARED BY J. SOTO

DATE: 11/04/2014

EFFECT ON DWG
☒ INC. ☐ UNINC.

DWG TITLE: AS350 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.

NOT COPY
ALL INFO
ENGINEERING
ALL NOTED COPY
STATE OF AMENDMENT
EFFECT NOTICE
WORK ORDER

138353 MLJ
15-10-29

76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N	TC	PART NUMBER	.4003	.4001			
			QTY		DESCRIPTION	MATERIAL	SPECIFICATION

DOCUMENTS EFFECTED:

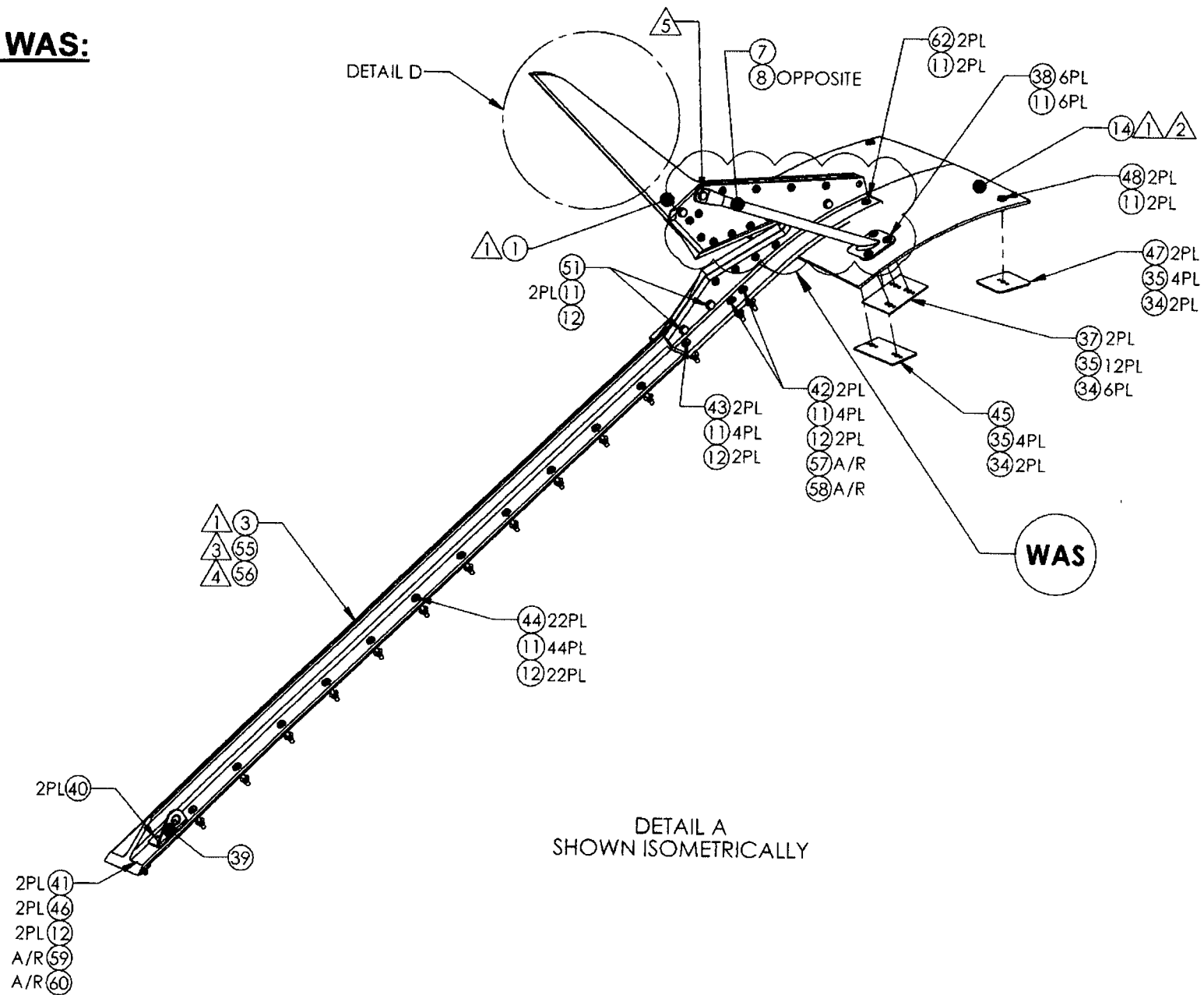
☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

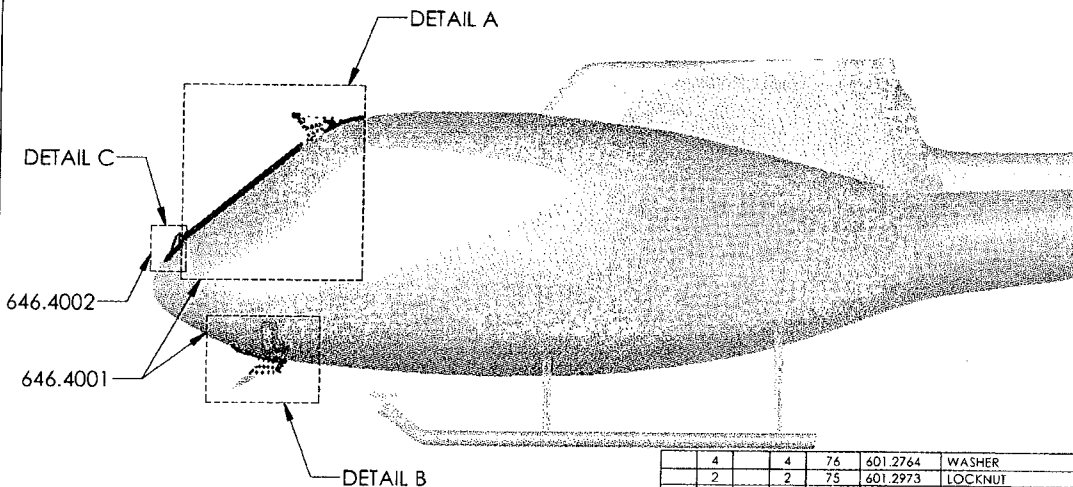
☐ YES ☒ NO

SHEET 2 WAS:

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1



4	4	76	601.2764	WASHER	NAS1149P1832
2	2	75	601.2973	LOCKNUT	MS21042-08
2	2	74	601.2988	SCREW	MS27039-0813
2	2	73	601.2943	LOCKNUT	MS21042-3
2	2	72	601.3128	NUT	AN316C4R
2	2	71	601.3209	LOCKNUT	MS21042L4
4	4	70	601.2638	WASHER	NAS1149P0432
2	2	69	601.2669	BOLT	AN4C7A
2	2	68	601.3119	CLEVIS	AN665-34R
2	2	67	601.3121	EYE BOLT	AN44-5A
2	2	66	650.9201	EYE BRACKET ASSY	
REF	REF	65	647.5701	GPS MOUNT KIT	
2	2	64	601.3151	WASHER	NAS1149P0343P
2	2	63	601.2911	SCREW	MS24694553
2	2	62	601.2637	SCREW	MS27039-1-16
2	2	61	601.2763	BOLT	AN3-12A
1	1	60	646.3913	SHIM	
4	4	59	646.3912	SHIM	
1	1	58	646.3911	SHIM	
4	4	57	646.3910	SHIM	
5	5	56	600.1013	PRIMER	
4004	4003	4002	4001	FIND #	PART #
					DESCRIPTION
					MATL
					SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECHS 02199, 02351, 02719 & 02765	02/08/2010	P. BRAVO
B	INCORPORATED ECH 03046, 03079 & 04731	11/01/2014	P. BRAVO

8 FT	8 FT	55	600.0129	VHB TAPE				
1	1	54	600.1012	SEALANT	FR-1425 CLASS B			
1	1	53	600.0991	MAGNIBOND 4398 PART B				
1	1	52	600.0990	MAGNIBOND 4398 PART A				
10	10	51	601.2826	BOLT	AN3-11A			
	2	50	646.3814	WIPER BRACKET				
	2	49	601.2910	SCREW	MS27039-1-18			
2		48	601.1365	SCREW	MS27039-1-10			
2		47	646.3719	DOUBLER				
	2	46	646.3718	CUSTOM WASHER				
1		45	646.3717	DOUBLER				
	22	44	601.1948	SCREW	MS27039-1-19			
2		43	601.1952	SCREW	MS27039-1-20			
2		42	601.1956	SCREW	MS27039-1-21			
4		41	601.2829	SCREW	MS24694554			
2		40	601.2831	RIVET	MS20470ADS-7			
1		39	646.3716	GAUGE BRACKET				
6		38	601.1953	SCREW	MS27039-1-12			
2		37	646.3715	STRUT DOUBLER				
2		36	601.2824	BOLT	AN3-5A			
36		35	601.2277	RIVET	CERN445-307			
18		34	600.0795	NUTPLATE	MS21047-3			
3		33	601.2565	RIVET	MS20470ADS-7			
1		32	646.3813	STRUT BRACKET				
4		31	601.2822	BOLT	AN3-3A			
2		30	646.3812	GUSSET BRACKET				
8		29	601.2564	RIVET	MS20470ADS-6			
1		28	646.3714	GUSSET				
1		27	646.3610	FILLER				
1		26	601.2830	SCREW	MS24694555			
2		25	601.2825	BOLT	AN3-6A			
1		24	646.3811	RADIUS BLOCK				
1		23	646.3712	CLIP				
1		22	646.3711	CLIP				
8		21	601.2832	RIVET	MS20470ADS-5.5			
14		20	601.2020	RIVET	CR3215-5.3			
10		19	601.2823	BOLT	AN3-4A			
1		18	601.2827	BOLT	AN3-13A			
5		17	601.2912	SCREW	MS24694551			
1		16	646.3713	GUSSET				
1		15	646.3210	SUPPORT				
1		14	646.3710	DOUBLER				
1		13	646.3110	CHANNEL				
8	53	6	61	12	601.1624	LOCKNUT	MS21042L3	
18	120	16	138	11	601.1607	WASHER	NAS1149P0337P	
		1	10	646.3410	LH WIPER DEFLECTOR			
		1	9	646.3411	RH WIPER DEFLECTOR			
	2	2	8	647.7703	STRUT ASSY			
	2	2	7	647.0112	STRUT BRACKET			
	1	1	6	646.3511	STRUT			
	1	1	5	646.3510	STRUT			
2		2	4	646.3810	BRACKET			
	1	1	3	646.2910	DEFLECTOR			
	1	1	2	646.3001	LOWER CUTTER ASSY			
	1	1	1	646.3301	UPPER CUTTER ASSY			
X				646.4004	FIXED PROVISIONS KIT			
	X			646.4003	CABLE CUTTERS KIT WITHOUT TIED PROVISIONS			
				646.4002	AS350 WIPER DEFLECTOR KIT			
				646.4001	AS350 CABLE CUTTERS KIT			
4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC

QTY

NEXT ASSY (\$)

ORIGINAL DATE
MO-DA-YR 08-27-08
DRAWN BY
S. HUI
CHECKED
P. BRAVO
DRAWING APPROVAL
DATE 08-27-08
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

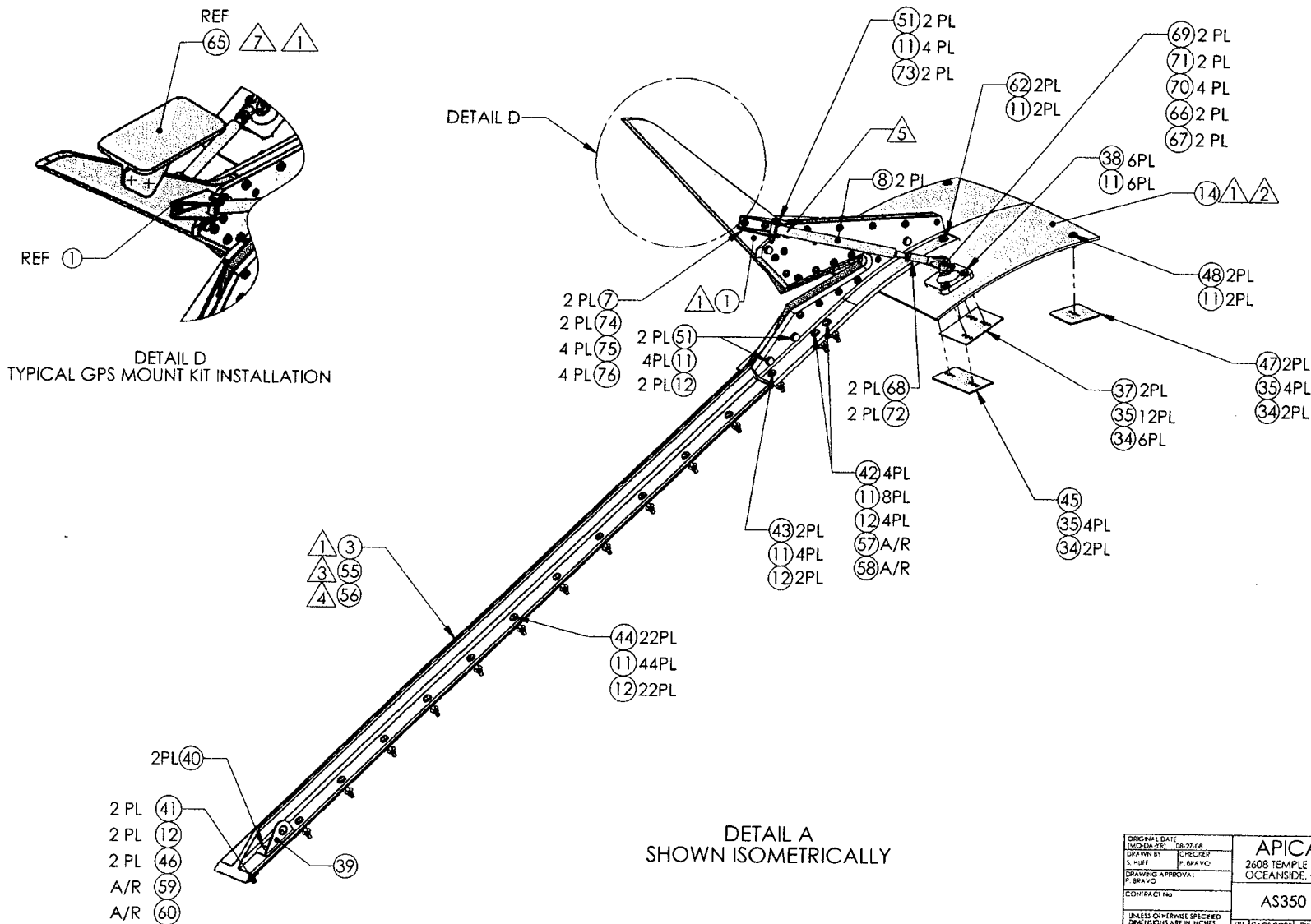
PARTS LIST

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA 92056-3512 (760)724-5300

AS350 CABLE CUTTERS KIT

SCALE NONE SHEET 1 OF 4

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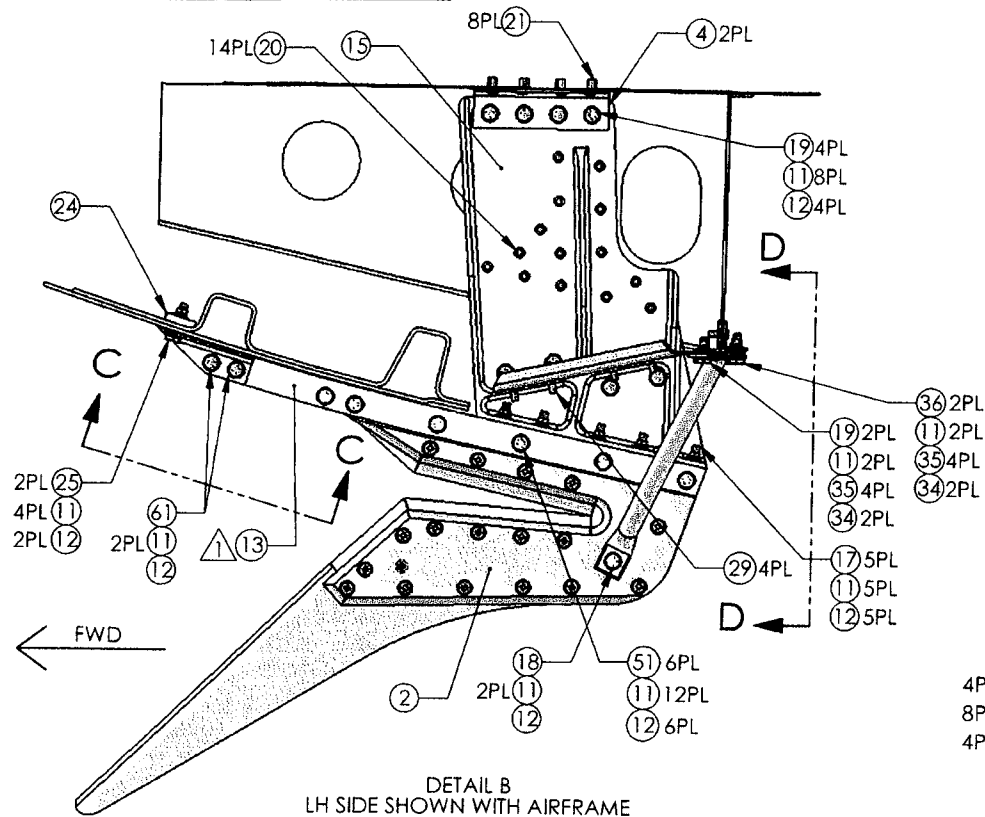
ORIGINAL DATE (M/D/YR) 08-27-08		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWN BY S. HUFF	CHECKED BY P. BRAYO		
DRAWING APPROVAL P. BRAYO			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°			
SHEET B	CAGE CODE 07M26	DWG. NO. 646.4000	REV. B
SCALE: NONE		SHEET 2 OF 4	

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760) 724-5300

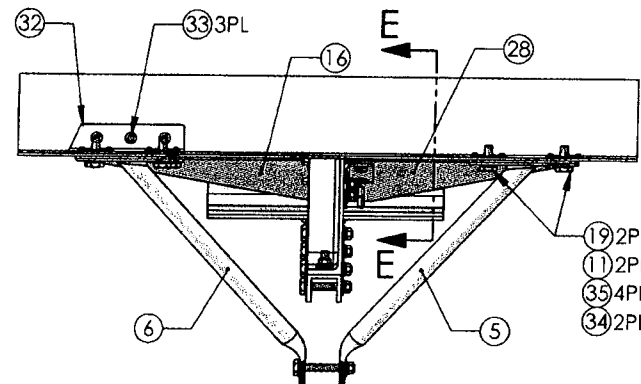
AS350 CABLE CUTTERS KIT

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

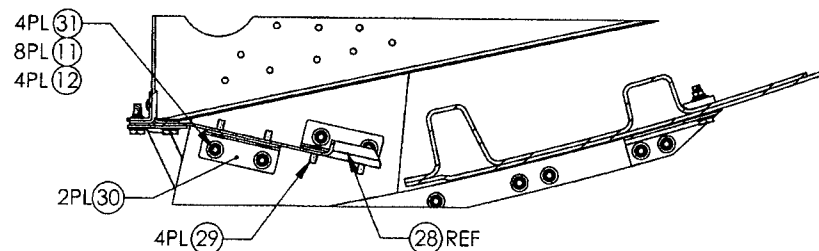
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



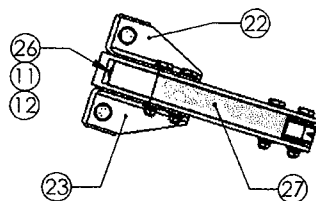
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION D-D
CUTTER HIDDEN FOR CLARITY



SECTION E-E

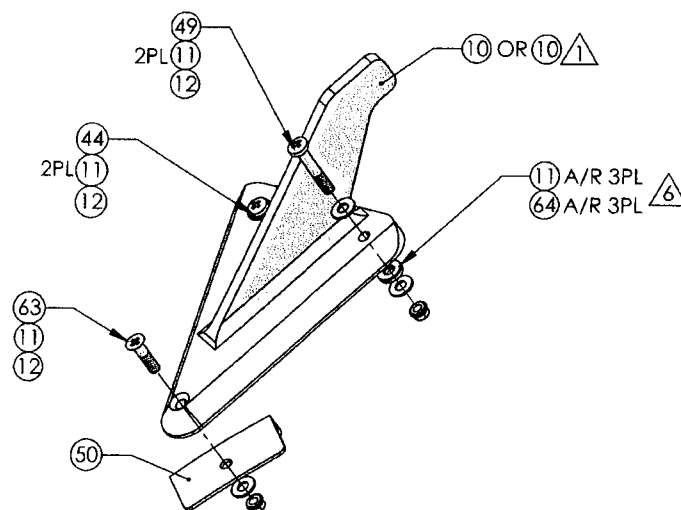


SECTION C-C

ORIGINAL DATE: 08-27-08		APICAL INDUSTRIES	
DRAWN BY: J. HUBB		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: P. BRAYO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. BRAYO		AS350 CABLE CUTTERS KIT	
DATE: 08-27-08		SCALE: NONE	
CONTRACT NO:		SHEET 3 OF 4	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES CLEARANCE: .015" 2 PLACE DECIMALS: ±.01 3 PLACE DECIMALS: ±.005 ANGLES: ±.5°		REV B	
SIZE: 8		DWG. NO. 646.4000	
CASE CODE: 07M26		REV B	

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

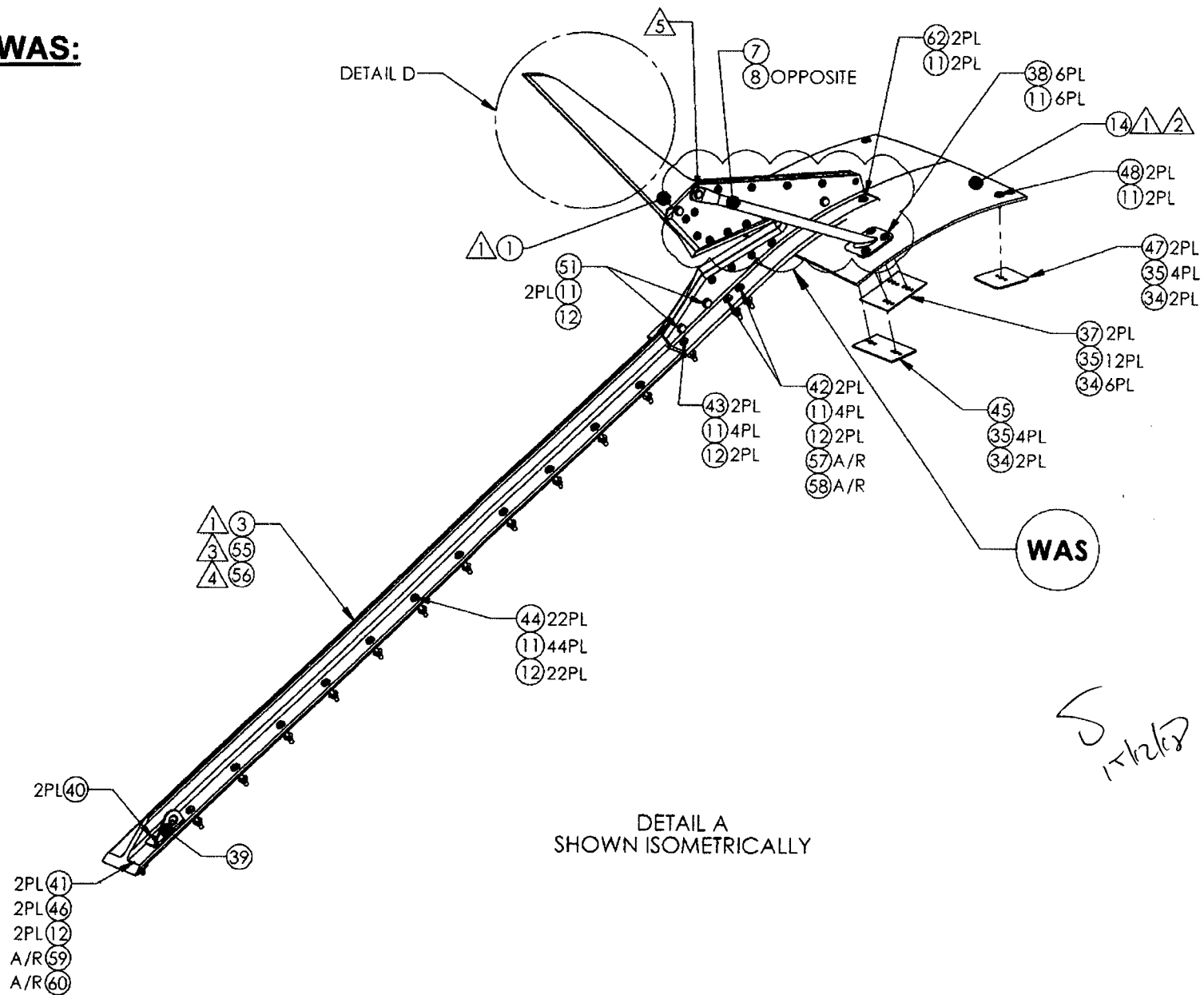
ORIGINAL DATE JMD-DA-101 08-27-06		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRAYO		AS350 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAYO		SCALE NONE	
DATE 08-27-06		SHEET 4 OF 4	
CONTRACT NO.		REV. B	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		CAGE CODE DWG. NO. 646.4000	

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 04731				SHEET 1 OF 2	
	DWG NO. 646.4000	REV: A	PREPARED BY J. SOTO	DATE: 11/04/2014		EFFECT ON DWG ☒ INC. ☐ UNINC.
	DWG TITLE: AS350 CABLE CUTTERS KIT					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF. NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.					

*Red wh.
5/15/12/18*

76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N	TC	PART NUMBER	.4003	.4001			
			QTY		DESCRIPTION	MATERIAL	SPECIFICATION

DOCUMENTS EFFECTED:	☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM	CHANGE CATEGORY	DER REVIEW REQUIRED
		☐ MAJOR ☒ MINOR	☐ YES ☒ NO

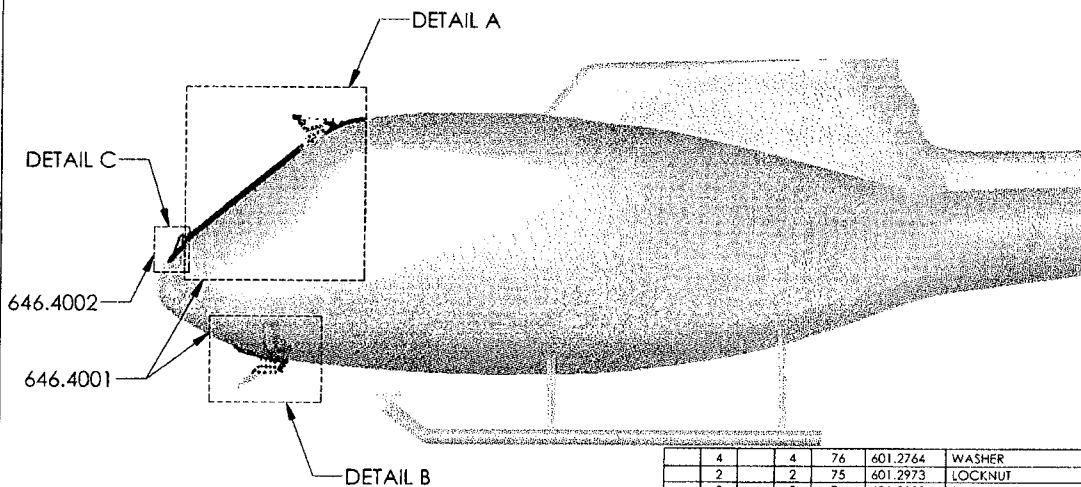
SHEET 2 WAS:

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NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR : MCMMASTER-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1

5/15/2014



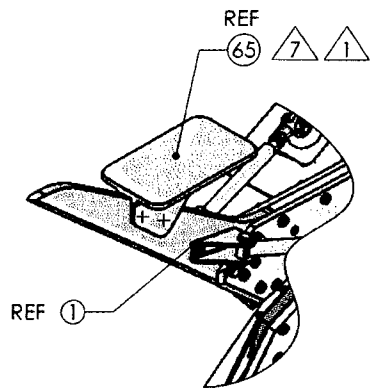
4	4	76	601.2764	WASHER	NAS1149F0332
2	2	75	601.2973	LOCKNUT	MS21042-08
2	2	74	601.2988	SCREW	MS27039-0813
2	2	73	601.2943	LOCKNUT	MS21042-3
2	2	72	601.3128	NUT	AN316C4R
2	2	71	601.3209	LOCKNUT	MS21042L4
4	4	70	601.2638	WASHER	NAS1149F0432
2	2	69	601.2669	BOLT	AN4C7A
2	2	68	601.3119	CLEVIS	AN665-34R
2	2	67	601.3121	EYE BOLT	AN64-5A
2	2	66	650.9201	EYE BRACKET ASSY	
REF	REF	65	647.5701	GPS MOUNT KIT	
	6	64	601.3151	WASHER	NAS1149F033P
2	2	63	601.2911	SCREW	MS24694553
2	2	62	601.2637	SCREW	MS27039-1-16
2	2	61	601.2763	BOLT	AN3-12A
1	1	60	646.3913	SHIM	
4	4	59	646.3912	SHIM	
1	1	58	646.3911	SHIM	
4	4	57	646.3910	SHIM	
5	5	56	600.0113	PRIMER	
4004	4003	4002	4001	FIND #	PART #
					DESCRIPTION
					MATL
					SPEC.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
4	INCORPORATED ECH 02119, 02121, 02119 & 02145	02/08/2010	P. BRAVO
8	INCORPORATED ECH 03044, 03079 & 04311	11/04/2014	P. BRAVO

8 FT	8 FT	55	600.0129	VHB TAPE	
1	1	54	600.1012	SEALANT	PR-1425 CLASS B
1	1	53	600.0991	MAGNOBOND 6395 PART B	
1	1	52	600.0990	MAGNOBOND 6395 PART A	
10	10	51	601.2826	BOLT	AN3-11A
	2	50	646.3814	WIPER BRACKET	
2	2	49	601.2910	SCREW	MS27039-1-18
2	2	48	601.1365	SCREW	MS27039-1-10
2	2	47	646.3719	DOUBLER	
2	2	46	646.3718	CUSTOM WASHER	
1	1	45	646.3717	DOUBLER	
22	22	44	601.1948	SCREW	MS27039-1-19
2	2	43	601.1952	SCREW	MS27039-1-20
4	4	42	601.1956	SCREW	MS27039-1-21
2	2	41	601.2829	SCREW	MS24694554
2	2	40	601.2831	RIVET	MS20470ADS-7
1	1	39	646.3716	GAUGE BRACKET	
6	6	38	601.1953	SCREW	MS27039-1-12
2	2	37	646.3715	STRUT DOUBLER	
2	2	36	601.2824	BOLT	AN3-5A
36	36	35	601.2277	RIVET	DCR6453-307
18	18	34	600.0795	NUTPLATE	MS7-047-3
3	3	33	601.2565	RIVET	MS20470ADS-7
1	1	32	646.3813	STRUT BRACKET	
4	4	31	601.2822	BOLT	AN3-3A
2	2	30	646.3812	GUSSET BRACKET	
8	8	29	601.2564	RIVET	MS20470ADS-5
1	1	28	646.3714	GUSSET	
1	1	27	646.3610	FILLER	
1	1	26	601.2830	SCREW	MS24694555
2	2	25	601.2825	BOLT	AN3-6A
1	1	24	646.3811	RADIUS BLOCK	
1	1	23	646.3712	CLIP	
1	1	22	646.3711	CLIP	
8	8	21	601.2832	RIVET	MS20470ADS-5.5
14	14	20	601.2020	RIVET	CR2213-5.3
10	10	19	601.2823	BOLT	AN3-4A
1	1	18	601.2827	BOLT	AN3-3A
5	5	17	601.2912	SCREW	MS24694551
1	1	16	646.3713	GUSSET	
1	1	15	646.3210	SUPPORT	
1	1	14	646.3710	DOUBLER	
1	1	13	646.3110	CHANNEL	
8	53	61	601.1624	LOCKNUT	MS21042L3
18	120	16	601.1607	WASHER	NAS1149F0332P
	1	10	646.3410	LH WIPER DEFLECTOR	
	1	9	646.3411	RH WIPER DEFLECTOR	
2	2	8	647.7703	STRUT ASSY	
2	2	7	647.0112	STRUT BRACKET	
1	1	6	646.3511	STRUT	
1	1	5	646.3510	STRUT	
2	2	4	646.3810	BRACKET	
1	1	3	646.2910	DEFLECTOR	
1	1	2	646.3001	LOWER CUTTER ASSY	
1	1	1	646.3301	UPPER CUTTER ASSY	
X	X		646.4004	FIXED PROVISIONS KIT	
X	X		646.4003	CABLE CUTTERS KIT WITH 50 FT REEL	
X	X		646.4002	AS350 WIPER DEFLECTOR KIT	
X	X		646.4001	AS350 CABLE CUTTERS KIT	
4004	4003	4002	4001	FIND #	PART #
					DESCRIPTION
					MATL
					SPEC.

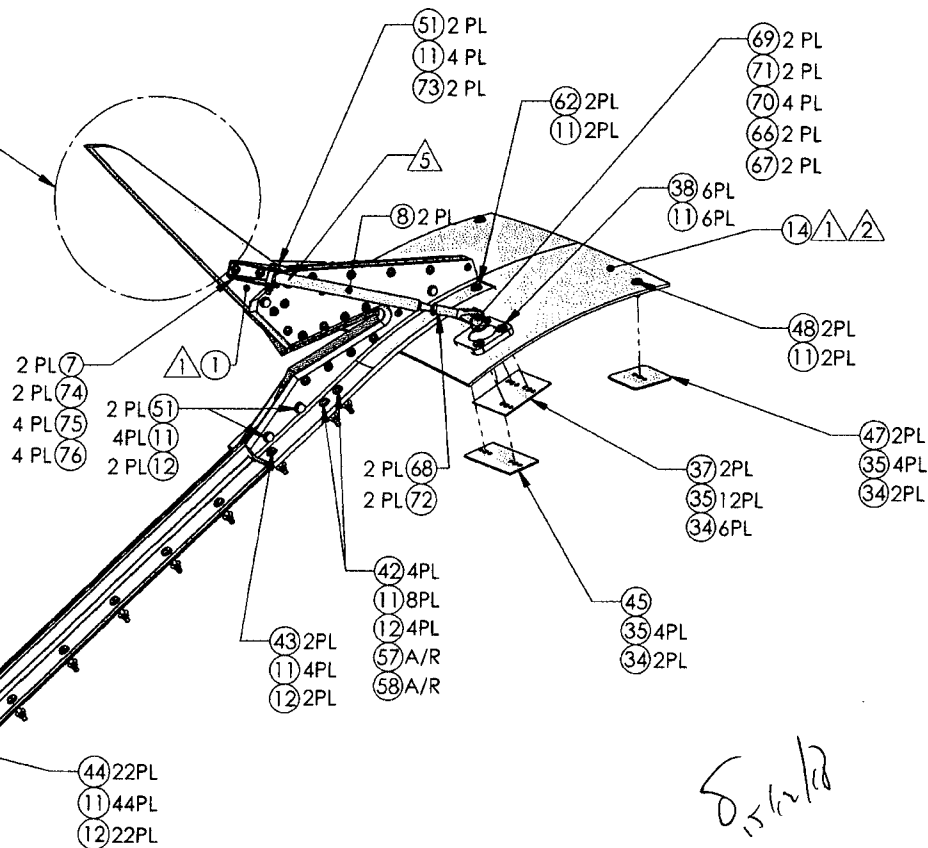
QTY		NEXT ASSY (S)		ORIGINAL DATE 11/04/2014 DRAWN BY S. HUFF CHECKED BY P. BRAVO	
APPROVAL DATE 08/27/09 CONTRACT NO.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300 AS350 CABLE CUTTERS KIT SCALE: NONE SHEET: 1 OF 4	

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DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

DETAIL D



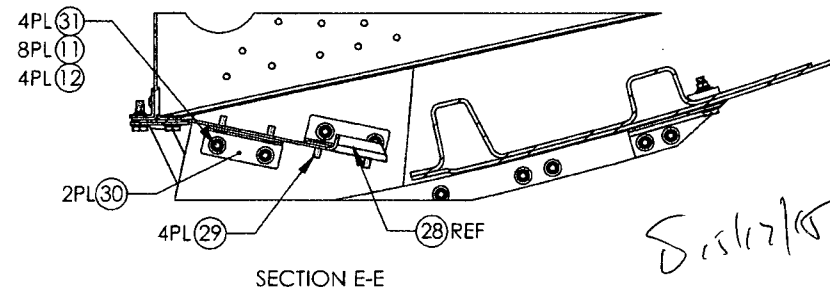
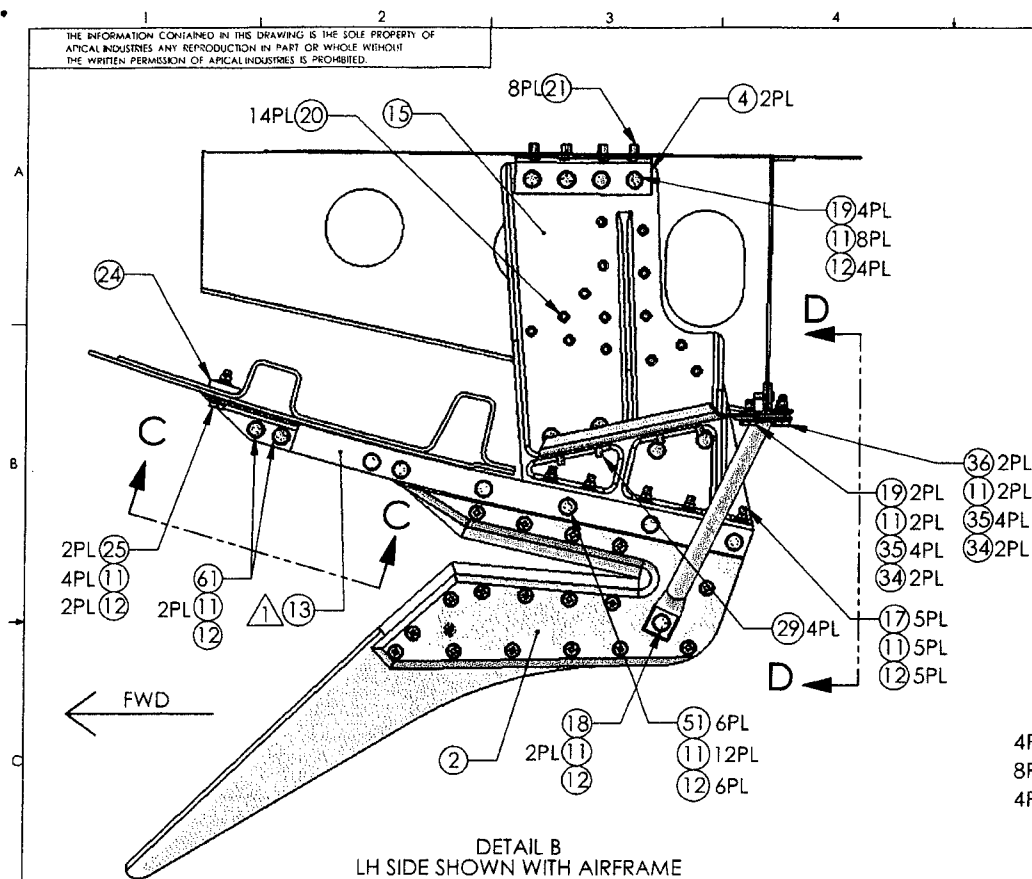
DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE 09-27-08		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRAVO		AS350 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAVO		SCALE: NONE	
CONTRACT NO.		SHEET 2 OF 4	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 2 OF 4	REV. 8

S. Huff

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

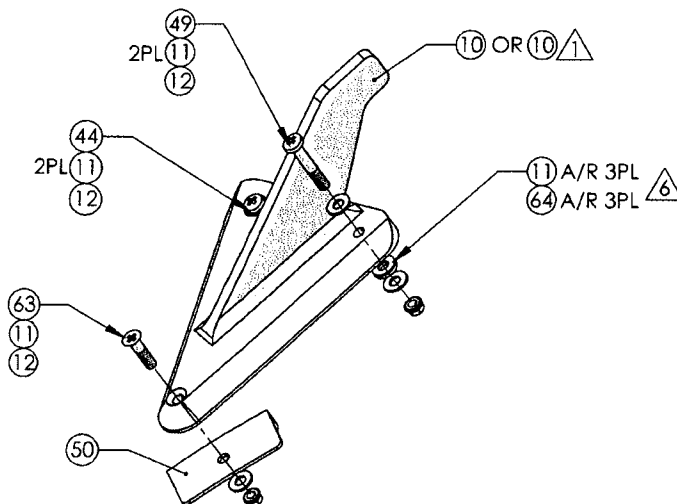


S. S. 1/17/15

ORIGINAL DATE 10-04-1961	08-27-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
DRAWN BY J. HOFF	CHECKED P. BRAYO			
DRAWING APPROVAL P. BRAYO	08-27-08			
CONTRACT NO.				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		AS3500 CABLE CUTTERS KIT		
SIZE	CAGE CODE	DWG. NO.	REV.	
	07M26	646.4000	8	
SCALE NONE		SHEET 3 OF 4		

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APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVES



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE: 08-27-08		APICAL INDUSTRIES	
DRAWN BY: CRECHET		2608 TEMPLE HEIGHTS DR.	
3. HUF		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. BRAVO		AS350 CABLE CUTTERS KIT	
08-27-08		SCALE: NONE	
CONTRACT NO.		SHEET 4 OF 4	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SIZE: 8	REV: 8
CAGE CODE: 07M16		OWG. NO.: 646.4000	